

# **EXHIBIT A**

(Complaint, Cumberland County 21-CVS-2415)

STATE OF NORTH CAROLINA  
COUNTY OF CUMBERLAND

FILED  
IN THE GENERAL COURT OF JUSTICE  
SUPERIOR COURT DIVISION  
2021 APR 13 PM 4:58 No. 21CVS2415

AQUA NORTH CAROLINA, INC.,

*Plaintiff,*

-vs-

THE 3M COMPANY, f/k/a Minnesota

Mining and Manufacturing Co., AGC

CHEMICALS AMERICAS INC., AMEREX

CORPORATION, ARCHROMA

MANAGEMENT LLC, ARKEMA INC.,

individually and as successor in interest to

Atofina S.A., BASF CORPORATION,

individually and as successor in interest to

Ciba Inc., BUCKEYE FIRE EQUIPMENT

COMPANY, CARRIER GLOBAL

CORPORATION, CHEMDESIGN

PRODUCTS INC., CHEMGUARD INC.,

CHEMICALS, INC., CLARIANT

CORPORATION, individually and as

successor in interest to Sandoz Chemical

Corporation, CORTEVA, INC., individually

and as successor in interest to DuPont

Chemical Solutions Enterprise,

DEEPWATER CHEMICALS, INC.,

DUPONT DE NEMOURS INC., individually

and as successor in interest to DuPont

Chemical Solutions Enterprise, DYNAX

CORPORATION, E. I. DUPONT DE

NEMOURS AND COMPANY, individually

and as successor in interest to DuPont

Chemical Solutions Enterprise, KIDDE-

FENWAL, INC., individually and as

successor in interest to Kidde Fire Fighting,

Inc., NATION FORD CHEMICAL

COMPANY, NATIONAL FOAM, INC.,

THE CHEMOURS COMPANY, individually

and as successor in interest to DuPont

Chemical Solutions Enterprise, THE

CHEMOURS COMPANY FC, LLC,

CUMBERLAND CO., C.S.C.

By )

)

)

)

)

**COMPLAINT**

JURY TRIAL DEMANDED

individually and as successor in interest to )  
DuPont Chemical Solutions Enterprise, and )  
TYCO FIRE PRODUCTS, LP, individually )  
and as successor in interest to The Ansul )  
Company, )  
  )  
*Defendants.*                                      )

---

Plaintiff AQUA NORTH CAROLINA, INC. (“Plaintiff”), by and through its undersigned counsel, hereby files this Complaint against Defendants, THE 3M COMPANY, f/k/a Minnesota Mining and Manufacturing Co., AGC CHEMICALS AMERICAS INC., AMEREX CORPORATION, ARCHROMA MANAGEMENT LLC, ARKEMA INC., BASF CORPORATION, BUCKEYE FIRE EQUIPMENT COMPANY, CARRIER GLOBAL CORPORATION, CHEMDESIGN PRODUCTS INC., CHEMGUARD INC., CHEMICALS, INC., CLARIANT CORPORATION, CORTEVA, INC., DEEPWATER CHEMICALS, INC., DUPONT DE NEMOURS INC., DYNAX CORPORATION, E. I. DUPONT DE NEMOURS AND COMPANY, KIDDE-FENWAL, INC., NATION FORD CHEMICAL COMPANY, NATIONAL FOAM, INC., THE CHEMOURS COMPANY, THE CHEMOURS COMPANY FC, LLC, and TYCO FIRE PRODUCTS LP (collectively “Defendants”) (collectively “Defendants”) and alleges, upon information and belief, as follows:

#### INTRODUCTION

1. Plaintiff brings this action for damages, contribution, and reimbursement of costs it has incurred, and is continuing to incur, to address the presence of per- and poly-fluoroalkyl substances (“PFAS”), including but not limited to perfluorooctanoic acid (“PFOA”), perfluorooctanesulfonic acid (“PFOS”), and/or their chemical precursors, found in the water

systems Plaintiff owns and operates throughout the State of North Carolina and in the groundwater sources that supply those systems.

2. PFOS and PFOA are fluorosurfactants that repel oil, grease, and water, and belong to a broader class of compounds known as per- and poly-fluoroalkyl substances or PFAS. PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, are or were components of AFFF products, which are firefighting suppressant agents used in training and firefighting activities for fighting Class B fires. Class B fires include fires involving hydrocarbon fuels such as petroleum or other flammable liquids.

3. PFAS such as PFOS and PFOA are mobile, persist indefinitely in the environment, bioaccumulate in individual organisms and humans, and biomagnify up the food chain. PFOS and PFOA are also associated with multiple and significant adverse health effects in humans, including but not limited to kidney cancer, testicular cancer, high cholesterol, thyroid disease, ulcerative colitis, and pregnancy-induced hypertension.

4. At various times from the 1960s through today, Defendants designed, manufactured, marketed, distributed, and/or sold AFFF products containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, and/or designed, manufactured, marketed, distributed, and/or sold the fluorosurfactants and/or perfluorinated chemicals (“PFCs”) contained in AFFF (collectively, “AFFF/Component Products”).

5. Since the creation of AFFF in the 1960s, Defendants’ AFFF/Component Products have been sold to military facilities, civilian airports, and municipal fire departments and training centers throughout the State of North Carolina, used as directed and intended by Defendants, and subsequently released into the environment during fire protection, training, and response activities, resulting in widespread PFAS contamination.

6. As the manufacturers of AFFF/Component Products, the Defendants knew or should have known that the inclusion of PFAS in AFFF presented an unreasonable risk to human health and the environment. Nonetheless, Defendants marketed and sold their products with the full knowledge that large quantities of AFFF would be used during training exercises and emergency situations in such a manner that dangerous PFAS chemicals would be introduced into the environment and contaminate the groundwater that serve as the supply sources for Plaintiff's water systems in the State of North Carolina.

7. In order to protect the health and well-being of its customers, Plaintiff has been, and will continue to be, forced to fund and implement improvements to its water systems in the State of North Carolina to treat and/or remove PFAS contamination caused by discharges of Defendants' AFFF/Component Products into the environment. Plaintiff also has incurred, and will continue to incur, ongoing operation and maintenance costs associated with the treatment and/or removal of PFAS from its water systems in the State of North Carolina. Through this action, Plaintiff seeks to recover from Defendants past and future compensatory damages relating to the investigation, remediation, removal, disposal, and monitoring of the PFAS contamination of its water systems in the State of North Carolina, as well as any and all punitive damages available as a result of the actions and/or inactions of Defendants.

#### JURISDICTION AND VENUE

8. Defendants Buckeye Fire Equipment Company and National Foam, Inc. are subject to personal jurisdiction in North Carolina under N.C. Gen. Stat. § 1-75.4(1)(b) because they are corporations and their principal place of business is located in North Carolina, and/or under N.C. Gen. Stat. § 1-75.4(1)(d) & (4) because they are engaged in substantial activity within this State,

whether such activity is wholly interstate, intrastate, or otherwise, and manufactured, marketed or sold relevant products used in this State.

9. Defendants The 3M Company, AGC Chemicals Americas Inc., Amerex Corporation, Archroma Management LLC, Arkema, Inc., BASF Corporation, Carrier Global Corporation, ChemDesign Products Inc., Chemguard, Inc., Chemicals, Inc., Clariant Corporation, Corteva, Inc., DeepWater Chemicals, Inc., DuPont de Nemours, Inc., Dynax Corporation, E.I. DuPont de Nemours and Company, Kidde-Fenwal, Inc., Nation Ford Chemical Company, The Chemours Company, The Chemours Company FC, LLC, and Tyco Fire Products LP are subject to personal jurisdiction in North Carolina under N.C. Gen. Stat. §§ 1-75.4(1)(d) and (4) because they engaged in substantial activity in North Carolina and caused injury to Plaintiff's property due to the use of products they manufactured in North Carolina.

10. This Court is a proper venue for this action, including but not limited to because Plaintiff owns and operates water systems in Cumberland County that have been contaminated with PFAS, such that the causes of action asserted herein, or some part thereof, arose in Cumberland County. *See* N.C. Gen. Stat. §§ 1-76, 1-77, 1-80.

11. This Court has jurisdiction over the parties and over the subject matter herein.

## PARTIES

### A. Plaintiff

12. Plaintiff, Aqua North Carolina, Inc., is a corporation organized and existing under the laws of North Carolina, with its principal place of business located at 202 MacKenan Court, Cary, North Carolina 27511. Plaintiff is a subsidiary of Essential Utilities, Inc., one of the largest publicly traded water, wastewater, and natural gas providers in the United States.

13. Plaintiff owns and operates 734 water systems in North Carolina. Plaintiff's water systems serve approximately 220,000 customers located in more than 50 counties throughout the State.

14. Plaintiff relies on a combination of groundwater wells and surface water purchased from third-party sources to supply the water its systems provide to customers in North Carolina. Plaintiff's water systems include over 1,500 active production wells and more than 80,000 water connections. Some but not all of Plaintiff's water systems have been contaminated with PFAS as a result of discharges of Defendants' AFFF/Component Products in North Carolina.

**B. Defendants**

15. The term "Defendants" refers to all Defendants named herein jointly and severally.

i. The AFFF Defendants

16. The term "AFFF Defendants" refers collectively to Defendants 3M Company, Amerex Corporation, Buckeye Fire Equipment Company, Carrier Global Corporation, Chemguard Inc., Kidde-Fenwal, Inc., National Foam, Inc., and Tyco Fire Products L.P.

17. Defendant The 3M Company f/k/a Minnesota Mining and Manufacturing Co. ("3M") is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business located at 3M Center, St. Paul, Minnesota 55144-1000.

18. Beginning before 1970 and until at least 2002, 3M designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

19. Defendant Amerex Corporation ("Amerex") is a corporation organized and existing under the laws of the State of Alabama, with its principal place of business located at 7595 Gadsden Highway, Trussville, AL 35173.

20. Amerex is a manufacturer of firefighting products. Beginning in 1971, it was a manufacturer of hand portable and wheeled extinguishers for commercial and industrial applications.

21. In 2011, Amerex acquired Solberg Scandinavian AS, one of the largest manufacturers of AFFF products in Europe.

22. On information and belief, beginning in 2011, Amerex designed, manufactured, marketed distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

23. Defendant Tyco Fire Products LP (“Tyco”) is a limited partnership organized under the laws of the State of Delaware, with its principal place of business located at One Stanton Street, Marinette, Wisconsin 54143-2542.

24. Tyco is the successor in interest of The Ansul Company (“Ansul”), having acquired Ansul in 1990.

25. Beginning in or around 1975, Ansul designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

26. After Tyco acquired Ansul in 1990, Tyco/Ansul continued to design, manufacture, market, distribute, and sell AFFF products containing PFAS, including but not limited to PFOA and PFOS.

27. Defendant Chemguard, Inc. (“Chemguard”) is a corporation organized under the laws of the State of Texas, with its principal place of business located at One Stanton Street, Marinette, Wisconsin 54143.

28. On information and belief, Chemguard designed, manufactured, marketed, distributed, and sold AFFF products containing PFAS, including but not limited to PFOA and PFOS.

29. On information and belief, Chemguard was acquired by Tyco International Ltd. in 2011.

30. Defendant Buckeye Fire Equipment Company ("Buckeye") is a corporation organized under the laws of the State of Ohio, with its principal place of business located at 110 Kings Road, Kings Mountain, North Carolina 28086.

31. On information and belief, Buckeye designed, manufactured, marketed, distributed, and sold AFFF products containing PFAS, including but not limited to PFOA and PFOS.

32. Defendant National Foam, Inc. ("National Foam") is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 141 Junny Road, Angier, North Carolina 27501.

33. Beginning in or around 1973, National Foam designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

34. On information and belief, National Foam currently manufactures the Angus brand of AFFF products and is a subsidiary of Angus International Safety Group.

35. On information and belief, National Foam merged with Chubb Fire Ltd. to form Chubb National Foam, Inc. in or around 1988.

36. On information and belief, Chubb is or has been composed of different subsidiaries and/or divisions, including but not limited to, Chubb Fire & Security Ltd., Chubb Security, PLC, Red Hawk Fire & Security, LLC, and/or Chubb National Foam, Inc. (collectively referred to as "Chubb").

37. On information and belief, Chubb was acquired by Williams Holdings in 1997.
38. On information and belief, Angus Fire Armour Corporation had previously been acquired by Williams Holdings in 1994.
39. On information and belief, Williams Holdings was separated and spun off into Chubb and Kidde P.L.C. in or around 2000.
40. On information and belief, when Williams Holdings was separated and spun off into separate companies, Kidde P.L.C. became the successor in interest to National Foam System, Inc., and Angus Fire Armour Corporation.
41. On information and belief, Kidde P.L.C. was acquired by United Technologies Corporation in or around 2005.
42. On information and belief, Angus Fire Armour Corporation and National Foam were separated in a corporate restructuring from United Technologies Corporation in or around 2013.
43. Defendant Kidde-Fenwal, Inc. ("Kidde-Fenwal") is a corporation organized under the laws of the State of Delaware, with its principal place of business at One Financial Plaza, Hartford, Connecticut 06101.
44. On information and belief, Kidde-Fenwal was an operating subsidiary of Kidde P.L.C. and manufactured AFFF following Kidde P.L.C.'s acquisition by United Technologies Corporation.
45. On information and belief, Kidde-Fenwal is the entity that divested the AFFF business unit now operated by National Foam in 2013.

46. Defendant Carrier Global Corporation (“Carrier”) is a corporation organized under the laws of the State of Delaware, with its principal place of business at 13995 Pasteur Boulevard, Palm Beach Gardens, Florida 33418.

47. On information and belief, Carrier was formed in March 2020 when United Technologies Corporation spun off its fire and security business before it merged with Raytheon Company in April 2020.

48. On information and belief, Kidde-Fenwal became a subsidiary of Carrier when United Technologies Corporation spun off its fire and security business in March 2020.

49. On information and belief, the AFFF Defendants designed, manufactured, marketed, distributed, and sold AFFF products containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, that were stored, handled, used, trained with, tested equipment with, otherwise discharged, and/or disposed in North Carolina, causing the contamination of Plaintiff’s water systems with PFAS.

ii. The Fluorosurfactant Defendants

50. The term “Fluorosurfactant Defendants” refers collectively to Defendants 3M, Arkema Inc., BASF Corporation, ChemDesign Products Incorporated, Chemguard Inc., Deepwater Chemicals, Inc., E.I. DuPont de Nemours and Company, The Chemours Company, The Chemours Company FC, LLC, DuPont de Nemours Inc., and Dynax Corporation.

51. Defendant Arkema Inc. (“Arkema”) is a corporation organized and existing under the laws of Pennsylvania, with its principal place of business at 900 First Avenue, King of Prussia, PA 19406.

52. On information and belief, beginning sometime in the early 1970s, the French chemical company Atochem designed, manufactured, marketed, distributed, and sold

fluorosurfactants containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in AFFF products.

53. On information and belief, when Atochem's parent company, Elf-Aquitaine, merged with TotalFina in 1999 to form TotalFinaElf, the two companies combined their chemical operations to create Atofina S.A. ("Atofina"). On information and belief, Atofina continued to design, manufacture, market, distribute, and sell fluorosurfactants containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in AFFF products.

54. On information and belief, Atofina sold its fluorosurfactant business to Dupont Chemical Solutions Enterprise in September 2002.

55. On information and belief, Arkema was created in October 2004 when TotalFinaElf spun off Atofina. On information and belief, Arkema is the successor in interest to Atofina and is legally responsible for the liabilities arising from the manufacture of fluorosurfactants used in AFFF by Atofina and its predecessors before September 2002.

56. Defendant BASF Corporation ("BASF") is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 100 Park Avenue, Florham Park, New Jersey 07932.

57. On information and belief, BASF is the successor-in-interest to Ciba, Inc. (f/k/a Ciba Specialty Chemicals Corporation).

58. On information and belief, Ciba Inc. designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in AFFF products.

59. Defendant ChemDesign Products Inc. (“ChemDesign”) is a corporation organized under the laws of Delaware, with its principal place of business located at 2 Stanton Street, Marinette, WI, 54143.

60. On information and belief, ChemDesign designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in AFFF products.

61. Defendant Deepwater Chemicals, Inc. (“Deepwater”) is a corporation organized under the laws of Delaware, with its principal place of business located at 196122 E County Road 40, Woodward, OK, 73801.

62. On information and belief, Deepwater Chemicals designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in AFFF products.

63. Defendant Dynax Corporation (“Dynax”) is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 103 Fairview Park Drive, Elmsford, New York 10523.

64. On information and belief, Dynax entered into the AFFF market on or about 1991 and quickly became a leading global producer of fluorosurfactants and fluorochemical stabilizers containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors.

65. On information and belief, Dynax designed, manufactured, marketed, distributed, and sold fluorosurfactants and fluorochemical stabilizers containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in AFFF products.

66. Defendant E.I. du Pont de Nemours & Company (“DuPont”) is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 974 Centre Road, Wilmington, Delaware 19805.

67. Defendant The Chemours Company (“Chemours Co.”) is a limited liability company organized under the laws of the State of Delaware, with its principal place of business located at 1007 Market Street, P.O. Box 2047, Wilmington, Delaware, 19899.

68. In 2015, DuPont spun off its so called “performance chemicals” business to Chemours Co., along with vast environmental liabilities which Chemours Co. assumed, including those related to PFAS and fluorosurfactants. On information and belief, Chemours Co. has supplied fluorosurfactants containing PFAS, including PFOS, PFOA, and/or their chemical precursors, to manufacturers of AFFF products.

69. On information and belief, Chemours Co. was incorporated as a subsidiary of DuPont as of April 30, 2015. From that time until July 2015, Chemours Co. was a wholly owned subsidiary of DuPont.

70. In July 2015, DuPont spun off Chemours Co. and transferred to Chemours Co. its “performance chemicals” business line, which includes its fluoroproducts business, distributing shares of Chemours Co. stock to DuPont stockholders, and Chemours Co. has since been an independent, publicly traded company.

71. Defendant The Chemours Company FC, LLC (“Chemours FC”) is a limited liability company organized under the laws of the State of Delaware, with its principal place of business located at 1007 Market Street, Wilmington, Delaware, 19899.

72. Defendant Corteva, Inc. (“Corteva”) is a corporation organized and existing under the laws of Delaware, with its principal place of business at 974 Centre Rd., Wilmington, Delaware 19805.

73. Defendant Dupont de Nemours Inc. f/k/a DowDuPont, Inc. (“Dupont de Nemours Inc.”) is a corporation organized and existing under the laws of Delaware, with its principal place of business at 974 Centre Road, Wilmington, Delaware 19805 and 2211 H.H. Dow Way, Midland, Michigan 48674.

74. On June 1, 2019, DowDuPont separated its agriculture business through the spin-off of Corteva.

75. Corteva was initially formed in February 2018. From that time until June 1, 2019, Corteva was a wholly owned subsidiary of DowDuPont.

76. On June 1, 2019, DowDuPont distributed to DowDuPont stockholders all issued and outstanding shares of Corteva common stock by way of a pro-rata dividend. Following that distribution, Corteva became the direct parent of E. I. Du Pont de Nemours & Co.

77. Corteva holds certain DowDuPont assets and liabilities, including DowDuPont’s agriculture and nutritional businesses.

78. On June 1, 2019, DowDuPont, the surviving entity after the spin-off of Corteva and of another entity known as Dow, Inc., changed its name to DuPont de Nemours, Inc., to be known as DuPont (“New DuPont”). New DuPont retained assets in the specialty products business lines following the above-described spin-offs, as well as the balance of the financial assets and liabilities of E.I DuPont not assumed by Corteva.

79. Defendants E. I. Du Pont de Nemours and Company; The Chemours Company; The Chemours Company FC, LLC; Corteva, Inc.; and DuPont de Nemours, Inc. are collectively referred to as “DuPont” throughout this Complaint.

80. On information and belief, DuPont designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in AFFF products.

81. On information and belief, 3M and Chemguard also designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in AFFF products.

82. On information and belief, the Fluorosurfactant Defendants designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in AFFF products that were stored, handled, used, trained with, tested equipment with, otherwise discharged, and/or disposed in North Carolina, causing the contamination of Plaintiff’s water systems with PFAS.

iii. The PFC Defendants

83. The term “PFC Defendants” refers collectively to 3M, AGC Chemicals Americas Inc., Archroma Management LLC, ChemDesign Products Inc., Chemicals, Inc., Clariant Corporation, Deepwater Chemicals, Inc., E. I. DuPont de Nemours and Company, The Chemours Company, The Chemours Company FC, LLC, Corteva, Inc., DuPont de Nemours Inc., and Nation Ford Chemical Company.

84. Defendant AGC Chemicals Americas, Inc. (“AGC”) is a corporation organized and existing under the laws of Delaware, having its principal place of business at 55 East Uwchlan Avenue, Suite 201, Exton, PA 19341.

85. On information and belief, AGC Chemicals Americas, Inc. was formed in 2004 and is a subsidiary of AGC Inc., a foreign corporation organized under the laws of Japan, with its a principal place of business in Tokyo, Japan.

86. AGC manufactures specialty chemicals. It offers glass, electronic displays, and chemical products, including resins, water and oil repellants, greenhouse films, silica additives, and various fluorointermediates.

87. On information and belief, AGC designed, manufactured, marketed, distributed, and sold PFCs containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in manufacturing the fluorosurfactants used in AFFF products.

88. Defendant Archroma Management LLC (“Archroma”) is a foreign corporation organized and existing under the laws of Switzerland, with its a principal place of business at Neuhofstrasse 11, 4153 Reinach, Basel-Land, Switzerland.

89. On information and belief, Archroma was formed in 2013 when Clariant Corporation divested its textile chemicals, paper specialties, and emulsions business to SK Capital Partners.

90. On information and belief, Archroma designed, manufactured, marketed, distributed, and sold PFCs containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in manufacturing the fluorosurfactants used in AFFF products.

91. Defendant Chemicals, Inc. (“Chemicals, Inc.”) is a corporation organized and existing under the laws of Texas, with its principal place of business located at 12321 Hatcherville, Baytown, TX 77520.

92. On information and belief, Chemicals, Inc. supplied PFCs containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in manufacturing the fluorosurfactants used in AFFF products.

93. Defendant Clariant Corporation (“Clariant”) is a corporation organized and existing under the laws of New York, with its principal place of business at 4000 Monroe Road, Charlotte, North Carolina 28205.

94. On information and belief, Clariant is the successor in interest to the specialty chemicals business of Sandoz Chemical Corporation (“Sandoz”). On information and belief, Sandoz spun off its specialty chemicals business to form Clariant in 1995.

95. On information and belief, Clariant supplied PFCs containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in manufacturing the fluorosurfactants used in AFFF products.

96. Defendant Nation Ford Chemical Co. (“Nation Ford”) is a corporation organized and existing under the laws of South Carolina, with its principal place of business located at 2300 Banks Street, Fort Mill, SC 29715.

97. On information and belief, Nation Ford supplied PFCs containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in manufacturing the fluorosurfactants used in AFFF products.

98. On information and belief, 3M, ChemDesign, Deepwater Chemicals, and DuPont also supplied PFCs containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for use in manufacturing the fluorosurfactants used in AFFF products.

99. On information and belief, the Fluorochemical Defendants supplied PFCs containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, for

use in manufacturing the fluorosurfactants used in AFFF products that were stored, handled, used, trained with, tested equipment with, otherwise discharged, and/or disposed in North Carolina, causing the contamination of Plaintiff's water systems with PFAS.

### **FACTUAL ALLEGATIONS RELEVANT TO ALL CAUSES OF ACTION**

#### **A. PFOA and PFOS and Their Risk to Public Health**

100. PFAS are chemical compounds containing fluorine and carbon. These substances have been used for decades in the manufacture of, among other things, household and commercial products that resist heat, stains, oil, and water. These substances are not naturally occurring and must be manufactured.

101. The two most widely studied types of these substances are PFOA and PFOS.

102. PFOA and PFOS have unique properties that cause them to be: (i) mobile and persistent, meaning that they readily spread into the environment where they break down very slowly; (ii) bioaccumulative and biomagnifying, meaning that they tend to accumulate in organisms and up the food chain; and (iii) toxic, meaning that they pose serious health risks to humans and animals.

103. PFOA and PFOS easily dissolve in water, and thus they are mobile and easily spread in the environment. PFOA and PFOS also readily contaminate soils and leach from the soil into groundwater, where they can travel significant distances.

104. PFOA and PFOS are characterized by the presence of multiple carbon-fluorine bonds, which are exceptionally strong and stable. As a result, PFOA and PFOS are thermally, chemically, and biologically stable. They resist degradation due to light, water, and biological processes.

105. Bioaccumulation occurs when an organism absorbs a substance at a rate faster than the rate at which the substance is lost by metabolism and excretion. Biomagnification occurs when the concentration of a substance in the tissues of organisms increases as the substance travels up the food chain.

106. PFOA and PFOS bioaccumulate/biomagnify in numerous ways. First, they are relatively stable once ingested, so that they bioaccumulate in individual organisms for significant periods of time. Because of this stability, any newly ingested PFOA and PFOS will be added to any PFOA and PFOS already present. In humans, PFOA and PFOS remain in the body for years.

107. PFOA and PFOS biomagnify up the food chain. This occurs, for example, when humans eat fish that have ingested PFOA and/or PFOS.

108. The chemical structure of PFOA and PFOS makes them resistant to breakdown or environmental degradation. As a result, they are persistent when released into the environment.

109. Exposure to PFAS is toxic and poses serious health risks to humans and animals.

110. PFAS are readily absorbed after consumption or inhalation and accumulate primarily in the bloodstream, kidney, and liver.

#### **B. Defendants' Manufacture and Sale of AFFF/Component Products**

111. AFFF is a type of water-based foam that was first developed in the 1960s to extinguish hydrocarbon fuel-based fires.

112. AFFF is a Class-B firefighting foam. It is mixed with water and used to extinguish fires that are difficult to fight, particularly those that involve petroleum or other flammable liquids.

113. AFFF is synthetically formed by combining fluorine-free hydrocarbon foaming agents with fluorosurfactants. When mixed with water, the resulting solution produces an aqueous

film that spreads across the surface of hydrocarbon fuel. This film provides fire extinguishment and is the source of the designation aqueous film-forming foam.

114. Beginning in the 1960s, the AFFF Defendants designed, manufactured, marketed, distributed, and/or sold AFFF products that used fluorosurfactants containing either PFOS, PFOA, or the chemical precursors that degrade into PFOS and PFOA.

115. AFFF can be made without fluorosurfactants that contain PFOA, PFOS, and/or their precursor chemicals. Fluorine-free firefighting foams, for instance, do not release PFOA, PFOS, and/or their precursor chemicals into the environment.

116. AFFF that contains fluorosurfactants, however, is better at extinguishing hydrocarbon fuel-based fires due to their surface-tension lowering properties, essentially smothering the fire, and starving it of oxygen.

117. The fluorosurfactants used in 3M's AFFF products were manufactured by 3M's patented process of electrochemical fluorination ("ECF").

118. The fluorosurfactants used in other AFFF products sold by the AFFF Defendants were manufactured by the Fluorosurfactant Defendants through the process of telomerization.

119. The PFCs the Fluorosurfactant Defendants needed to manufacture those fluorosurfactants contained PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, and were designed, manufactured, marketed, distributed, and/or sold by the PFC Defendants.

120. On information and belief, the PFC and Fluorosurfactant Defendants were aware that the PFCs and fluorosurfactants they designed, manufactured, marketed, distributed, and/or sold would be used in the AFFF products designed, manufactured, marketed, distributed, and/or sold by the AFFF Defendants.

121. On information and belief, the PFC and Fluorosurfactant Defendants designed, manufactured, marketed, distributed, and/or sold the PFC and/or fluorosurfactants contained in the AFFF products discharged into the environment during fire protection, training, and response activities, resulting in widespread PFAS contamination of Plaintiff's water systems in North Carolina.

122. On information and belief, the AFFF Defendants designed, manufactured, marketed, distributed, and/or sold the AFFF products discharged into the environment during fire protection, training, and response activities, resulting in widespread PFAS contamination of Plaintiff's water systems in North Carolina.

**C. Defendants' Knowledge of the Threats to Public Health and the Environment Posed by PFOS and PFOA**

123. On information and belief, by at least the 1970s 3M and DuPont knew or should have known that PFOA and PFOS are mobile and persistent, bioaccumulative and biomagnifying, and toxic.

124. On information and belief, 3M and DuPont concealed from the public and government agencies its knowledge of the threats to public health and the environment posed by PFOA and PFOS.

125. Some or all of the Defendants understood how stable the fluorinated surfactants used in AFFF are when released into the environment from their first sale to a customer, yet they failed to warn their customers or provide reasonable instruction on how to manage wastes generated from their products.

i. 1940s and 1950s: Early Warnings About the Persistence of AFFF

126. In 1947, 3M started its fluorochemical program, and within four years, it began selling its PFOA to DuPont. The persistence and contaminating nature of the fluorosurfactants

contained in AFFF products were understood prior to their commercial application at 3M's Cottage Grove facility in Minnesota.

127. The inventor of 3M's ECF process was J.H. Simons. Simons' 1948 patent for the ECF process reported that PFCs are "non-corrosive, and of little chemical reactivity," and "do not react with any of the metals at ordinary temperatures and react only with the more chemically reactive metals such as sodium, at elevated temperatures."<sup>1</sup>

128. Simons further reported that fluorosurfactants produced by the ECF process do not react with other compounds or reagents due to the blanket of fluorine atoms surrounding the carbon skeleton of the molecule. 3M understood that the stability of the carbon-to-fluorine bonds prevented its fluorosurfactants from undergoing further chemical reactions or degrading under natural processes in the environment.<sup>2</sup>

129. The thermal stability of 3M's fluorosurfactants was also understood prior to commercial production. Simons' patent application further discloses that the fluorosurfactants produced by the ECF process were thermally stable at temperatures up to 750° C (1382° F). Additional research by 3M expanded the understanding of the thermal stability of perfluorocarbon compounds.<sup>3</sup>

130. Nowhere in any Material Safety Data Sheet for any of Defendants' AFFF/Component Products is information on the thermal stability of those products disclosed. Failure to disclose knowledge of the stability of the PFCs and fluorosurfactants used in AFFF

---

<sup>1</sup> Simons, J. H., Fluorination of Organic Compounds, U.S. Patent No. 2,447,717. August 24, 1948, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1005.pdf>.

<sup>2</sup> Simons, J. H., 1950. Fluorocarbons and Their Production. Fluorine Chemistry, 1(12): 401-422, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX3008.pdf>.

<sup>3</sup> Bryce, T. J., 1950. Fluorocarbons - Their Properties and Wartime Development. Fluorine Chemistry, 1(13): 423-462.

products to customers is a failure to warn just how indestructible the AFFF's ingredients are when released to unprotected water sources and even treatment plants.

ii. 1960s: AFFF's Environmental Hazards Come Into Focus

131. By at least the end of the 1960s, additional research and testing performed by 3M and DuPont indicated to them that because of their unique chemical structure, fluorosurfactants, including at least PFOA, were resistant to environmental degradation and would persist in the environment essentially unaltered if allowed to enter the environment.

132. One 3M employee wrote in 1964: "This chemical stability also extends itself to all types of biological processes; there are no known biological organisms that are able to attack the carbon-fluorine bond in a fluorocarbon."<sup>4</sup> Thus, 3M knew by the mid-1960s that its surfactants were immune to chemical and biological degradation in soils and groundwater.

133. 3M also knew by 1964 that, fluorocarbon carboxylic acids and fluorocarbon sulfonic acids when dissolved dissociated to form highly stable perfluorocarboxylate and perfluorosulfonate ions. Later studies by 3M on the adsorption and mobility of FC-95 and FC-143 (the ammonium salt of PFOA) in soils indicated that very high solubility and very high mobility in soils for both compounds existed.<sup>5</sup>

iii. 1970s: Internal Studies Provide Evidence of Environmental and Health Risks

134. Although 3M knew by 1950 that the fluorosurfactants used in its AFFF products were persistent and would not degrade when released to the environment, it was another two decades before 3M finally got around to considering the environmental risks that fluorosurfactants

---

<sup>4</sup> Bryce, H.G., Industrial and Utilitarian Aspects of Fluorine Chemistry (1964), available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX3022.pdf>.

<sup>5</sup> Technical Report Summary re : Adsorption of FC 95 and FC143 on Soil, Feb. 27, 1978, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1158.pdf>.

posed—and only after it had secured its dominant position in a lucrative, robust market for AFFFs using fluorosurfactants.

135. A 1971 3M internal memo from states that “the thesis that there is ‘no natural sink’ for fluorocarbons obviously demands some attention.”<sup>6</sup> 3M therefore then understood at the very least that the fluorosurfactant used in its AFFF products would essentially never degrade once it was released into the environment.

136. By the mid-1970s, 3M and Ansul (and substantially possible other Defendants) understood the persistent nature of PFCs. A 1976 study, for example, observed no biodegradation of FC-95, the potassium salt of PFOS; a result 3M characterized at the time as being “unsurprising” in light of the fact that “[b]iodegradation of FC 95 is improbable because it is completely fluorinated.”<sup>7</sup>

137. In 1977, Ansul prepared a report titled “Environmentally Improved AFFF,” which acknowledged that releasing AFFF into the environment could pose potential negative impacts to groundwater quality.<sup>8</sup> Ansul wrote in the report: “The purpose of this work is to explore the development of experimental AFFF formulations that would exhibit reduced impact on the environment while retaining certain fire suppression characteristic . . . improvements [to AFFF formulations] are desired in the environmental area, i.e., development of compositions that have a reduced impact on the environment without loss of fire suppression effectiveness.” Thus, Ansul

---

<sup>6</sup> Memorandum from H.G. Bryce to R.M. Adams re : Ecological Aspects of Fluorocarbons, Sept. 13, 1971, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1088.pdf>.

<sup>7</sup> Technical Report Summary, August 12, 1976 [3MA01252037].

<sup>8</sup> Ansul Co., Final Report: Environmentally Improved AFFF, N00173-76-C-0295, Marinette, WI, Dec. 13, 1977, available at <https://apps.dtic.mil/dtic/tr/fulltext/u2/a050508.pdf>.

knew by the mid-1970s that the environmental impact of AFFF needed to be reduced, yet there is no evidence that Ansul (or any other Defendant) ever pursued initiatives to do so.

138. A 1978 3M biodegradation study likewise reported that an “extensive study strongly suggest[ed]” one of its PFCs is “likely to persist in the environment for extended period unaltered by metabolic attack.”<sup>9</sup> A year later, a 3M study reported that one of its fluorosurfactants “was found to be completely resistant to biological test conditions,” and that it appeared waterways were the “environmental sink” for fluorosurfactants.<sup>10</sup>

139. In 1979, 3M also completed a comprehensive biodegradation and toxicity study covering investigations between 1975 and 1978.<sup>11</sup> More than a decade after 3M began selling AFFF containing fluorosurfactants it wrote: “there has been a general lack of knowledge relative to the environmental impact of these chemicals.” The report ominously asked, “If these materials are not biodegradable, what is their fate in the environment?”

140. During the 1970s, 3M also learned that the fluorosurfactants used in AFFF accumulated in the human body and were “even more toxic” than previously believed.

141. In 1975, 3M learned that PFAS was present in the blood of the general population.<sup>12</sup> Since PFOA and PFOS are not naturally occurring, the finding should have alerted 3M to the possibility that their products were a source of this PFOS. The finding also should have alerted 3M

---

<sup>9</sup> Technical Report Summary re : Fate of Fluorochemicals in the Environment, Biodegradation Studies of Fluorocarbons - II, Jan. 1, 1978, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1153.pdf>.

<sup>10</sup> Technical Report Summary re : Fate of Fluorochemicals in the Environment, Biodegradation Studies of Fluorocarbons - III, July 19, 1978, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1179.pdf>.

<sup>11</sup> Technical Report Summary, Final Comprehensive Report on FM 3422, Feb. 2, 1979, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX2563.pdf>.

<sup>12</sup> Memorandum from G.H. Crawford to L.C. Krogh et al. re: Fluorocarbons in Human Blood Plasma, Aug. 20, 1975, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1118.pdf>.

to the possibility that PFOS might be mobile, persistent, bioaccumulative, and biomagnifying, as those characteristics could explain how PFOS from 3M's products ended up in human blood.

142. In 1976, 3M found PFAS in the blood of its workers at levels "up to 1000 times 'normal' amounts of organically bound fluorine in their blood."<sup>13</sup> This finding should have alerted 3M to the same issues raised by the prior year's findings.

143. Animal studies by 3M in 1978 showed that PFOA reduced the survival rate of fathead minnow fish eggs;<sup>14</sup> that PFOS was toxic to monkeys;<sup>15</sup> and that PFOS and PFOA were toxic to rats.<sup>16</sup> In the study involving monkeys ingesting PFOS, all of the monkeys died within days of ingesting food contaminated with PFOS.

144. In 1979, 3M and DuPont discussed 3M's discovery of PFOA in the blood of its workers and came to the same conclusion that there was "no reason" to notify the EPA of the finding.<sup>17</sup>

---

<sup>13</sup> 3M Chronology – Fluorochemicals in Blood, Aug. 26, 1977, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1144.pdf>.

<sup>14</sup> The Effects of Continuous Aqueous Exposure to 78.03 on Hatchability of Eggs and Growth and Survival of Fry of Fathead Minnow, June 1978, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1176.pdf>.

<sup>15</sup> Ninety-Day Subacute Rhesus Monkey Toxicity Study, Dec. 18, 1978, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1191.pdf>; Aborted FC95 Monkey Study, Jan. 2, 1979, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1193.pdf>.

<sup>16</sup> Acute Oral Toxicity (LD<sub>50</sub>) Study in Rats (FC-143), May 5, 1978, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1170.pdf>; FC-95, FC-143 and FM-3422 – 90 Day Subacute Toxicity Studies Conducted at IRDC – Review of Final Reports and Summary, Mar. 20, 1979, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1199.pdf>.

<sup>17</sup> Memorandum from R.A. Prokop to J.D. Lazerte re: Disclosure of Information on Levels of Fluorochemicals in Blood, July 26, 1979, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX2723.pdf>.

iv. 1980s and 1990s: Evidence of AFFF's Health Risks Continues to Mount

145. By at least the end of the 1980s, additional research and testing performed by Defendants, including at least 3M and DuPont, indicated that elevated incidence of certain cancers and other adverse health effects, including elevated liver enzymes and birth defects, had been observed among workers exposed to such materials, including at least PFOA. This data, however, was not published, provided to governmental entities as required by law, or otherwise publicly disclosed at the time.

146. In 1981, DuPont tested for and found PFOA in the blood of female plant workers Parkersburg, West Virginia. DuPont observed and documented pregnancy outcomes in exposed workers, finding two of seven children born to female plant workers between 1979 and 1981 had birth defects—one an “unconfirmed” eye and tear duct defect, and one a nostril and eye defect.<sup>18</sup>

147. In 1983, 3M researchers concluded that concerns about PFAS “give rise to concern for environmental safety,” including “legitimate questions about the persistence, accumulation potential, and ecotoxicity of fluorochemicals in the environment.”<sup>19</sup> That same year, 3M completed a study finding that PFOS caused the growth of cancerous tumors in rats.<sup>20</sup> This finding was later shared with DuPont and led them to consider whether “they may be obliged under their policy to call FC-143 a carcinogen in animals.”<sup>21</sup>

---

<sup>18</sup> C-8 Blood Sampling Results, available at <http://tiny.cc/v8z1mz>.

<sup>19</sup> 3M Environmental Laboratory (EE & PC), Fate of Fluorochemicals - Phase II, May 20, 1983, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1284.pdf>.

<sup>20</sup> Two Year Oral (Diet) Toxicity/Carcinogenicity Study of Fluorochemical FC-143 in Rats, Volume 1 of 4, Aug. 29, 1987, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1337.pdf>.

<sup>21</sup> Memorandum from R.G. Perkins to F.D. Griffith re: Summary of the Review of the FC-143 Two-Year Feeder Study Report to be presented at the January 7, 1988 meeting with DuPont, January 5, 1988, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1343.pdf>.

148. In 1984, 3M documented a trend of increasing levels of PFOS in the bodies of 3M workers, leading one of the company's medical officers to warn in an internal memo: "we must view this present trend with serious concern. It is certainly possible that . . . exposure opportunities are providing a potential uptake of fluorochemicals that exceeds excretion capabilities of the body."<sup>22</sup>

149. A 1997 material safety data sheet ("MSDS") for a non-AFFF product made by 3M listed its only ingredients as water, PFOA, and other perfluoroalkyl substances and warned that the product includes "a chemical which can cause cancer." The MSDS cited "1983 and 1993 studies conducted jointly by 3M and DuPont" as support for this statement. On information and belief, the MSDS for 3M's AFFF products did not provide similar warnings or information.

v. Defendants Hid What They Knew from the Government and the Public.

150. Federal law requires chemical manufacturers and distributors to immediately notify the EPA if they have information that "reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment." Toxic Substances Control Act ("TSCA") § 8(e), 15 U.S.C. § 2607(e).

151. In April 2006, 3M agreed to pay EPA a penalty of more than \$1.5 million after being cited for 244 violations of the TSCA, which included violations for failing to disclose studies regarding PFAS, including but not limited to PFOS, PFOA, and other PFCs dating back decades.

152. Likewise, in December 2005, the EPA announced it was imposing the "Largest Environmental Administrative Penalty in Agency History" against DuPont based on evidence that it violated the TSCA by concealing the environmental and health effects of PFOA.

---

<sup>22</sup> Memorandum from D.E. Roach to P.F. Riehle re: Organic Fluorine Levels, Aug. 31, 1984, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1313.pdf>.

153. On information and belief, Defendants knew or should have known that AFFF containing PFOA or PFOS would very likely injure and/or threaten public health and the environment, even when used as intended or directed.

154. Defendants failed to warn of these risks to the environment and public health, including the impact of their AFFF/Component Products on the quality of unprotected water sources.

155. Defendants were all sophisticated and knowledgeable in the art and science of designing, formulating, and manufacturing AFFF/Component Products. They understood far more about the properties of their AFFF/Component Products—including the potential hazards they posed to human health and the environment—than any of their customers. Still, Defendants declined to use their sophistication and knowledge to design safer products.

**D. The Impact of PFOS and PFOA on the Environment and Human Health Is Finally Revealed**

156. As discussed above, neither 3M, DuPont, nor, on information and belief, any other Defendant complied with their obligations to notify EPA about the “substantial risk of injury to health or the environment” posed by their AFFF/Component Products. See TSCA § 8(e).

157. Despite decades of research, 3M first shared its concerns with EPA in the late 1990s. In a May 1998 report submitted to EPA, “3M chose to report simply that PFOS had been found in the blood of animals, which is true but omits the most significant information,” according to a former 3M employee.<sup>23</sup>

158. On information and belief, 3M began in 2000 to phase out its production of products that contained PFOS and PFOA in response to pressure from the EPA.

---

<sup>23</sup> Letter from R. Purdy, Mar. 28, 1999, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1001.pdf>.

159. Once the truth about PFOS and PFOA was revealed, researchers began to study the environmental and health effects associated with them, including a “C8 Science Panel” formed out of a class action settlement arising from contamination from DuPont’s Washington Works located in Wood County, West Virginia.

160. The C8 panel consisted of three epidemiologists specifically tasked with determining whether there was a probable link between PFOA exposure and human diseases. In 2012, the panel found probable links between PFOA and kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, pregnancy-induced hypertension (including preeclampsia), and hypercholesterolemia.

161. Human health effects associated with PFOS exposure include immune system effects, changes in liver enzymes and thyroid hormones, low birth weight, high uric acid, and high cholesterol. In laboratory testing on animals, PFOA and PFOS have caused the growth of tumors, changed hormone levels, and affected the function of the liver, thyroid, pancreas, and immune system.

162. The injuries caused by PFAS can arise months or years after exposure.

163. Even after the C8 Science Panel publicly announced that human exposure to 50 parts per trillion, or more, of PFOA in drinking water for one year or longer had “probable links” with certain human diseases, including kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, preeclampsia, and medically-diagnosed high cholesterol, Defendants repeatedly assured and represented to governmental entities, their customers, and the public (and continue to do so) that the presence of PFOA in human blood at the levels found within the United States presents no risk of harm and is of no legal, toxicological, or medical significance of any kind.

164. Furthermore, Defendants have represented to and assured such governmental entities, their customers, and the public (and continue to do so) that the work of the independent C8 Science Panel was inadequate to satisfy the standards of Defendants to prove such adverse effects upon and/or any risk to humans with respect to PFOA in human blood.

165. At all relevant times, Defendants, through their acts and/or omissions, controlled, minimized, trivialized, manipulated, and/or otherwise influenced the information that was published in peer-review journals, released by any governmental entity, and/or otherwise made available to the public relating to PFAS in human blood and any alleged adverse impacts and/or risks associated therewith, effectively preventing the public from discovering the existence and extent of any injuries/harm as alleged herein.

166. On May 2, 2012, the EPA published its Third Unregulated Contaminant Monitoring Rule (“UCMR3”), requiring water systems nationwide to monitor for thirty contaminants of concern between 2013 and 2015, including PFOS and PFOA.<sup>24</sup>

167. In the May 2015 “Madrid Statement on Poly- and Perfluoroalkyl Substances (PFAS’s),” scientists and other professionals from a variety of disciplines, concerned about the production and release into the environment of PFOA, called for greater regulation, restrictions, limits on the manufacture and handling of any PFOA containing product, and to develop safe non-fluorinated alternatives to these products to avoid long-term harm to human health and the environment.<sup>25</sup>

---

<sup>24</sup> *Revisions to the Unregulated Contaminant Monitoring Regulation (UCMR 3) for Public Water Systems*, 77 Fed. Reg: 26072 (May 2, 2012).

<sup>25</sup> Blum A, Balan SA, Scheringer M, Trier X, Goldenman G, Cousins IT, Diamond M, Fletcher T, Higgins C, Lindeman AE, Peaslee G, de Voogt P, Wang Z, Weber R. 2015. The Madrid statement on poly- and perfluoroalkyl substances (PFASs). Environ Health Perspect 123:A107–A111; <http://dx.doi.org/10.1289/ehp.1509934>.

168. On May 25, 2016, the EPA released a lifetime health advisory (HAs) and health effects support documents for PFOS and PFOA.<sup>26</sup> See Fed. Register, Vol. 81, No. 101, May 25, 2016. The EPA developed the HAs to assist governmental officials in protecting public health when PFOS and PFOA are present in drinking water. The EPA HAs identified the concentration of PFOS and PFOA in drinking water at or below which adverse health effects are not anticipated to occur over a lifetime of exposure at 0.07 ppb or 70 ppt. The HAs were based on peer-reviewed studies of the effects of PFOS and PFOA on laboratory animals (rats and mice) and were also informed by epidemiological studies of human populations exposed to PFOS. These studies indicate that exposure to PFOS and PFOA over these levels may result in adverse health effects, including:

- a. Developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations);
- b. Cancer (testicular and kidney);
- c. Liver effects (tissue damage);
- d. Immune effects (e.g., antibody production and immunity);
- e. Thyroid disease and other effects (e.g., cholesterol changes).

169. In addition, PFOS and PFOA are hazardous materials because they pose a “present or potential threat to human health.”<sup>27</sup>

170. In 2016, the National Toxicology Program of the United States Department of Health and Human Services (“NTP”) and the International Agency for Research on Cancer

---

<sup>26</sup> See Fed. Register, Vol. 81, No. 101, May 25, 2016, Lifetime Health Advisories and Health Effects Support Documents for Perfluorooctanoic Acid and Perfluorooctane Sulfonate.

<sup>27</sup> *Id.*; see also *National Ass'n for Surface Finishing v. EPA*, 795 F.3d 1, 3, 6 (D.C. Cir. 2015) (referring to PFOS as a “toxic compound” and a “hazardous chemical.”).

(“IARC”) both released extensive analyses of the expanding body of research regarding the adverse effects of PFCs. The NTP concluded that both PFOA and PFOS are “presumed to be an immune hazard to humans” based on a “consistent pattern of findings” of adverse immune effects in human (epidemiology) studies and “high confidence” that PFOA and PFOS exposure was associated with suppression of immune responses in animal (toxicology) studies.<sup>28</sup>

171. IARC similarly concluded that there is “evidence” of “the carcinogenicity of . . . PFOA” in humans and in experimental animals, meaning that “[a] positive association has been observed between exposure to the agent and cancer for which a causal interpretation is . . . credible.”<sup>29</sup>

172. California has listed PFOA and PFOS to its Proposition 65 list as a chemical known to cause reproductive toxicity under the Safe Drinking Water and Toxic Enforcement Act of 1986.<sup>30</sup>

173. The United States Senate and House of Representatives passed the National Defense Authorization Act in November 2017, which included \$42 Million to remediate PFC contamination from military bases, as well as devoting \$7 Million toward the Investing in Testing Act, which authorizes the Center for Disease Control and Prevention (“CDC”) to conduct a study

---

<sup>28</sup> See U.S. Dep’t of Health and Human Services, Nat’l Toxicology Program, *NTP Monograph: Immunotoxicity Associated with Exposure to Perfluorooctanoic Acid or Perfluorooctane Sulfonate* (Sept. 2016), at 1, 17, 19, available at [https://ntp.niehs.nih.gov/ntp/ohat/pfoa\\_pfos/pfoa\\_pfosmonograph\\_508.pdf](https://ntp.niehs.nih.gov/ntp/ohat/pfoa_pfos/pfoa_pfosmonograph_508.pdf)

<sup>29</sup> See Int’l Agency for Research on Cancer, IARC Monographs: *Some Chemicals Used as Solvents and in Polymer Manufacture* (Dec. 2016), at 27, 97, available at <http://monographs.iarc.fr/ENG/Monographs/vol110/mono110.pdf>.

<sup>30</sup> California Office of Environmental Health Hazard Assessment, *Chemicals Listed Effective Nov. 10, 2017 as Known to the State of California to Cause Reproductive Toxicity: Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS)*, Nov. 9, 2017, available at <https://oehha.ca.gov/proposition-65/crnr/chemicals-listed-effective-november-10-2017-known-state-california-cause>.

into the long-term health effects of PFOA and PFOS exposure.<sup>31</sup> The legislation also required that the Department of Defense submit a report on the status of developing a new military specification for AFFF that did not contain PFOS or PFOA.<sup>32</sup>

174. In June 2018, the Agency for Toxic Substances and Disease Registry (“ATSDR”) and EPA released a draft toxicological profile for PFOS and PFOA and recommended the drinking water advisory levels be lowered to 11 ppt for PFOA and 7 ppt for PFOS.<sup>33</sup>

175. On February 20, 2020, the EPA announced a proposed decision to regulate PFOA and PFOS under the Safe Drinking Water Act, which the agency characterized as a “key milestone” in its efforts to “help communities address per- and polyfluoroalkyl substances (PFAS) nationwide.”<sup>34</sup> Following a public comment period on its proposed decision, the EPA will decide whether to move forward with the process of establishing a national primary drinking water regulation for PFOA and PFOS.

#### **E. Numerous States Adopt Strict Drinking Water Standards for PFOS and PFOA**

176. As more information about the environmental and health hazards of PFAS has come to light, numerous states have recently adopted drinking water standards for PFOS and PFOA that are more stringent than the limits announced by EPA in its May 2016 health advisory.

---

<sup>31</sup> National Defense Authorization Act for Fiscal Year 2018, H.R. 2810, 115th Congress (2017), available at <https://www.congress.gov/115/plaws/publ91/PLAW-115publ91.pdf>.

<sup>32</sup> *Id.*; see also U.S. Department of Defense, *Alternatives to Aqueous Film Forming Foam Report to Congress*, June 2018, available at <https://www.denix.osd.mil/derp/home/documents/alternatives-to-aqueous-film-forming-foam-report-to-congress/>.

<sup>33</sup> ATSDR, *Toxicological Profile for Perfluoroalkyls: Draft for Public Comment* (June 2018), available at <https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf>.

<sup>34</sup> Press Release, *EPA Announces Proposed Decision to Regulate PFOA and PFOS in Drinking Water*, Feb. 20, 2020, available at <https://www.epa.gov/newsreleases/epa-announces-proposed-decision-regulate-pfoa-and-pfos-drinking-water>.

177. In April 2019, the State of Minnesota adopted advisory drinking water limits of 15 ppt for PFOS and 27 ppt for PFOA.

178. In early 2020, two more states adopted drinking water limits for PFOS and PFOA. The State of California adopted drinking water limits of 40 ppt for PFOS and 10 ppt for PFOA in February 2020, while a month later the State of Vermont adopted a limit of 20 ppt for the combined concentration of PFAS, including but not limited to PFOS, PFOA, and three other PFAS chemicals.

179. Three more states finalized drinking water limits for PFOS and PFOA in the summer of 2020. The State of New Jersey was the first of three states, adopting limits of 13 ppt for PFOS and 14 ppt for PFOA in June 2020. New York was next in adopting limits of 10 ppt for both chemicals in late July, followed by Michigan adopting limits of 16 ppt for PFOS and 8 ppt for PFOA in early August.

180. Most recently, the State of Massachusetts adopted a drinking water limit in October 2020 requiring that the combined concentration of PFAS, including but not limited to PFOS, PFOA, and four other PFAS chemicals not exceed 20 ppt.

**F. Plaintiff's Efforts to Remediate Existing PFAS Contamination and Improve Its Water Systems**

181. Plaintiff is committed to supplying potable drinking water to its North Carolina customers consistent with federal, state, and local guidelines and requirements. Thus, Plaintiff must implement remedial measures to ensure that the water it supplies to its customers meets those standards.

182. As a direct result of Defendants' conduct, Plaintiff has been forced to address the contamination of its water systems with PFAS in order to protect the health and well-being of its customers. In doing so, Plaintiff has already expended, and will continue to expend, significant

resources in order to sample, test, investigate, and monitor its water systems for PFAS contamination.

183. Plaintiff has also incurred, and will continue to incur, significant costs in order to make capital improvements to its water systems, such as the installation of Granular Activated Carbon (“GAC”) adsorption to reduce and/or remove PFAS contamination, and other adjustments that include taking certain wells out of service to mitigate the impact of PFAS on Plaintiff’s water supplies. Operation and maintenance measures for these improvements and adjustments are ongoing and will only add to the costs Plaintiff will continue to incur to address the contamination caused by Defendants’ AFFF/Component Products.

**G. AFFF Containing PFAS Is Fungible and Commingled in the Groundwater**

184. Once it has been released to the environment, AFFF containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, lacks characteristics that would enable identification of the company that manufactured that particular batch of AFFF or chemical feedstock.

185. A subsurface plume, even if it comes from a single location, such as a retention pond or fire training area, originates from mixed batches of AFFF and chemical feedstock coming from different manufacturers.

186. Because it is nearly impossible to precisely identify the specific manufacturer of any given AFFF/Component Product that contaminated its water systems with PFAS, Plaintiff must pursue all Defendants, jointly and severally.

187. Defendants are also jointly and severally liable because they conspired to conceal the true toxic nature of PFAS, to profit from the use of AFFF/Component Products containing PFAS, at Plaintiff’s expense, and to attempt to avoid liability.

## **CAUSES OF ACTION**

### **COUNT I: INADEQUATE DESIGN/FORMULATION (N.C. Gen. Stat. § 99B-6)**

188. Plaintiff incorporates by reference each and every allegation set forth in all preceding paragraphs as if fully restated herein.

189. As manufacturers of AFFF/Component Products containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, Defendants owed a duty to all persons whom its products might foreseeably harm, including Plaintiff, to act with due care and reasonably in connection with the design and formulation of the relevant products. Defendants, however, breached their duties with regard to ensuring adequate design and formulation, which breach renders Defendants herein jointly and severally liable to Plaintiff in tort for the resulting proximate harms and injuries.

190. In accordance with G.S. § 99B-6, the time of the relevant products' manufacture, the manufacturer Defendants acted unreasonably in designing or formulating the product, and this conduct was a proximate cause of the harm for which damages are sought, and in addition:

- a. At the time the product left the control of the Defendant manufacturers, the manufacturers unreasonably failed to adopt a safer, practical, feasible, and otherwise reasonable alternative design or formulation that could then have been reasonably adopted and that would have prevented or substantially reduced the risk of harm without substantially impairing the usefulness, practicality, or desirability of the products;

b. At the time the products left the control of the manufacturers, the design or formulation of the products was so unreasonable that a reasonable person, aware of the relevant facts, would not use or consume a product of this design.

191. During the pertinent times, the Defendants materially involved in manufacturing, designing and formulating the relevant products acted unreasonably in light of:

- a. The nature and magnitude of the risks of harm associated with the design or formulation in light of the intended and reasonably foreseeable uses, modifications, or alterations of the product;
- b. The likely awareness of product users, whether based on warnings, general knowledge, or otherwise, of those risks of harm;
- c. The extent to which the design or formulation conformed to any applicable government standard that was in effect when the product left the control of its manufacturer;
- d. The utility of the product, including the performance, safety, and other advantages associated with that design or formulation;
- e. The technical, economic, and practical feasibility of using an alternative design or formulation at the time of manufacture; and
- f. The nature and magnitude of any foreseeable risks associated with the alternative design or formulation.

192. Defendants' conduct with regarding to engaging in the design of the relevant AFFF/Component Products was negligent and resulted in the use of defective designs and formulations for reasons including but not limited to that:

- a. PFAS causes extensive groundwater contamination, even when used in its foreseeable and intended manner;
- b. Even at extremely low levels, PFAS render drinking water unfit for consumption;
- c. PFAS poses significant threats to public health; and
- d. PFAS create real and potential environmental damage.

193. Defendants knew of these risks and failed to use reasonable care in the design of their AFFF/Component Products.

194. AFFF containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, pose a greater danger to the environment and to human health than would be expected by ordinary consumers and persons such as Plaintiff and the general public.

195. At all times, Defendants were capable of making AFFF/Component Products that did not contain PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors. Thus, reasonable alternative designs existed which were capable of preventing Plaintiff's injuries.

196. The risks posed by AFFF containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, far outweigh the products' utility as a flame-control product.

197. The likelihood that Defendants' AFFF/Component Products would be spilled, discharged, disposed of, or released into the environment and contaminated Plaintiff's wells far outweighed any burden on Defendants to adopt an alternative design, and outweighed the adverse effect, if any, of such alternative design on the utility of the product.

198. As a direct result of the defective design and formulation of Defendants' AFFF/Component Products, Plaintiff has incurred significant costs in responding to the contamination of its North Carolina water systems with dangerous PFAS chemicals, including but

not limited to costs relating to shutting off and loss of use certain of its wells, installing and operating water treatment systems, sampling and testing water from impacted wells, upgrading its in-house laboratory, personnel time devoted to investigating, responding to and remediating PSAS issues and the costs other monitoring and remediation/restoration costs.

199. The design, formulation and manufacturing dangers and deficiencies of the relevant products did not arise out of any inherent characteristic of the product that could not be eliminated without substantially compromising the product's usefulness or desirability and that was recognized by the ordinary person with the ordinary knowledge common to the community. Rather, the dangers inherent in the product design and formulation were not open and obvious to foreseeable users, and were such as could have been materially reduced or eliminated had the Defendants acted with due care in designing, formulating and manufacturing the products.

200. Defendants knew that it was substantially certain that their acts and omissions described above would contaminate groundwater. Defendants committed each of the above-described acts and omissions knowingly, willfully, and/or with fraud, oppression, or malice, and with conscious and/or reckless disregard for Plaintiff's health and safety, and/or property rights.

**COUNT II:**  
**INADEQUATE WARNING/INSTRUCTION**  
(N.C. Gen. Stat. § 99B-5)

201. Plaintiff incorporates by reference each and every allegation set forth in all preceding paragraphs as if fully restated herein.

202. As manufacturers of AFFF/Component Products containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, Defendants had a duty to provide adequate warnings of the risks of these products to all persons whom its product might foreseeably

harm, including Plaintiff and the public, and by breaching this duty, rendered themselves liable to Plaintiff in tort for the resulting proximate harms and injuries.

203. Under G.S. § 99B-5, Defendants were each manufacturers or sellers of one or more relevant product and acted unreasonably in failing to provide necessary warnings or instructions, and their failures to provide adequate warnings or instructions constituted a proximate cause of the harm for which damages are sought.

204. Under G.S. § 99B-5, at the time the products left the control of the Defendant manufacturers or sellers, the products, without an adequate warning or instruction, created an unreasonably dangerous condition that the manufacturers or sellers knew, or in the exercise of ordinary care should have known, posed a substantial risk of harm to a reasonably foreseeable claimant.

205. Furthermore, with regard to the relevant products herein, after such products left the control of the Defendant manufacturers or sellers, the Defendants became aware of or in the exercise of ordinary care should have known that the product posed a substantial risk of harm to a reasonably foreseeable user or consumer and failed to take reasonable steps to give adequate warning or instruction or to take other reasonable action under the circumstances.

206. Defendants' AFFF/Component Products included dangerous characteristics, not open and obvious to the foreseeable user, but which were known or should have been known to the manufacturer and seller Defendants, including but not limited to that:

- a. PFAS causes extensive groundwater contamination, even when used in its foreseeable and intended manner;
- b. even at extremely low levels, PFAS render drinking water unfit for consumption;
- c. PFAS poses significant threats to public health; and

d. PFAS create real and potential environmental damage.

207. Defendants knew of the health and environmental risks associated with their AFFF/Component Products and failed to provide a warning that would lead an ordinary reasonable purchaser, user or handler of its product to contemplate and appreciate the dangers associated with their products or an instruction that would have avoided Plaintiff's injuries.

208. Despite Defendants' knowledge of the environmental and human health hazards associated with the use and/or disposal of their AFFF/Component Products in the vicinity of drinking water supplies or their sources, including PFAS contamination of public drinking supplies and private wells, Defendants failed to issue any warnings, instructions, recalls, or advice regarding their AFFF/Component Products to the purchasers, users or handlers of the product, as well as to foreseeable third parties at risk of being adversely affected by the product's dangerous properties, including Plaintiff, governmental agencies and/or the public.

209. As a direct result of Defendants' conduct and the resulting contamination, Plaintiff has incurred the significant costs and expenses identified above.

210. Defendants knew that it was substantially certain that their acts and omissions described, including the failure to warn, above would cause injury and damage, including PFAS contamination of Plaintiff's water systems in North Carolina. Defendants committed each of the above-described acts and omissions knowingly, willfully, and/or with fraud, oppression, or malice, and with conscious and/or reckless disregard for Plaintiff's health and safety, and/or property rights.

**COUNT III:**  
**NEGLIGENCE**

211. Plaintiff incorporates by reference each and every allegation set forth in all preceding paragraphs as if fully restated herein.

212. As manufacturers of AFFF/Component Products containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, Defendants owed a duty to Plaintiff and to all persons whom its products might foreseeably harm and to exercise due care in the formulation, manufacture, sale, marketing, labeling, advertising, warning, and use of PFAS-containing AFFF.

213. Defendants owed a duty to Plaintiff to act reasonably and not place inherently dangerous AFFF/Component Products into the marketplace when its release into the air, soil, and water was imminent and certain.

214. Defendants knew or should have known that PFAS from AFFF used for fire protection, training, and response activities would enter into the environment, including groundwater and groundwater sources located at, beneath or nearby the place it was so used.

215. Defendants knew or should have known that PFAS are highly soluble in water, highly mobile, extremely persistent in the environment, and highly likely to contaminate water supplies if released into the environment.

216. Defendants knew or should have known that the manner in which they were designing, manufacturing, marketing, distributing, and selling their AFFF/Component Products would result in injury and damage, including PFAS contamination of groundwater and drinking and potable water supply wells.

217. Despite the fact that Defendants knew or should have known that PFAS are toxic, can contaminate water resources and are carcinogenic, Defendants negligently:

- a. designed, manufactured, formulated, handled, labeled, instructed, controlled, marketed, promoted, advertised, and/or sold AFFF/Component Products containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors;

- b. issued deficient instructions and precautions on how their AFFF/Component Products should be used and disposed of, thereby permitting PFAS to contaminate Plaintiffs' water systems in North Carolina;
- c. failed to recall and/or warn the possessors and users of their AFFF/Component Products of the dangers of groundwater contamination as a result of standard use and disposal of their products;
- d. failed and refused to issue the appropriate warning and/or recalls to the possessors and users of their AFFF/Component Products;
- e. failing to take reasonable, adequate, and sufficient steps or actions to eliminate, correct, or remedy any contamination after it occurred; and
- f. otherwise being negligent, careless, or reckless in their respective design, manufacture, formulation, handling, labeling, warning, instructions marketing, promotion, advertising and/or sale of AFFF/Component Products containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors.

218. As manufacturers, Defendants were in the best position to provide a safe and suitable product with adequate instructions, proper labeling, and sufficient warnings about their AFFF/Component Products, and to take steps to eliminate, correct, or remedy any contamination they caused.

219. Defendants knew that it was substantially certain that their acts and omissions described above would inevitably result in the contamination of the Plaintiff's water systems in North Carolina.

220. As a direct result of Defendants' acts and omissions and the resulting contamination, Plaintiff has incurred the significant expenses and costs described above.

221. Defendants committed each of the above-described acts and omissions knowingly, willfully, and/or with fraud, oppression, or malice, and with conscious and/or reckless disregard for Plaintiff's health and safety, and/or property rights.

**COUNT IV:**  
**PRIVATE NUISANCE**

222. Plaintiff incorporates by reference each and every allegation set forth in all preceding paragraphs as if fully restated herein.

223. Plaintiff is the owner of land, easements, and water rights that permit it to extract surface and groundwater for use in its wells to provide water to its customers in North Carolina.

224. Defendants' intentional, negligent, and/or reckless conduct, as alleged herein, has resulted in contamination of Plaintiff's water systems in North Carolina with PFAS, human carcinogens that cause adverse human health effects.

225. Defendants' manufacture, distribution, sale, supply, and marketing of AFFF/Component Products containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, was unreasonable because Defendants had knowledge of the unique and dangerous chemical properties of PFAS and knew that contamination of groundwater supply wells was substantially certain to occur, but failed to provide adequate warnings of, or take any other precautionary measures to mitigate, those hazards.

226. The contamination caused, contributed to, and/or maintained by Defendants substantially and unreasonably interfered and continues to interfere with Plaintiff's use and enjoyment of its property.

227. Each Defendant has caused, contributed to, and/or maintained such nuisance, and is a substantial contributor to such nuisance.

228. As a direct and proximate result of Defendants' acts and omissions as alleged herein, Plaintiff has suffered, are suffering, and will continue to suffer substantial damages related to PFAS contamination of the Impacted Systems, including but not limited to devaluation, capital costs, legal costs, and sampling costs.

229. Defendants knew it was substantially certain that their acts and omissions described above would cause injury and damage, including PFAS contamination of Plaintiff's groundwater supplies. Defendants committed each of the above-described acts and omissions knowingly, willfully, and with oppression, fraud, and/or malice. Such conduct was performed to promote sales of AFFF, in conscious disregard to the probable dangerous consequences of that conduct and its reasonably foreseeable impacts on groundwater resources, public health and welfare. Therefore, Plaintiffs request an award of punitive damages in an amount sufficient to punish these Defendants and that fairly reflects the aggravating circumstances alleged herein.

230. During the pertinent times, the Defendants jointly and severally acted so as to cause a substantial interference with the Plaintiff's use and enjoyment of its own property; and this substantial interference was unreasonable. The interference caused by Defendants rose above the level of a slight inconvenience or a petty annoyance. Defendants' conduct gave rise to substantial interference that was unreasonable in that a person of ordinary prudence and discretion would consider it excessive or inappropriate after giving due consideration to the interest of the Plaintiff, the interest of the Defendant and the interest of the community.

231. During the pertinent times, the Plaintiff held a property interest sufficient to afford it standing to allege private nuisance.

232. Defendants are jointly and severally liable for all such damages as arose out of their unlawful contribution toward causing a private nuisance, and Plaintiffs are entitled to recover all such damages and other relief as set forth below.

**COUNT V:**  
**TRESPASS**

233. Plaintiff incorporates by reference each and every allegation set forth in all preceding paragraphs as if fully restated herein.

234. Plaintiff is the owner, operator, and actual possessor of real property and improvements used for collecting drinking water throughout North Carolina.

235. Defendants designed, manufactured, distributed, marketed, and sold AFFF/Component Products with the actual knowledge and/or substantial certainty that AFFF containing PFAS, including but not limited to PFOS, PFOA, and/or their chemical precursors, would, through normal use, release PFAS that would migrate into groundwater, causing contamination.

236. Defendants negligently, recklessly, and/or intentionally designed, manufactured, distributed, marketed, and sold AFFF/Component Products in a manner that caused PFAS to contaminate and trespass upon Plaintiff's property.

237. Defendants knew that it was substantially certain that their acts and omissions described above would threaten public health and cause extensive contamination of property, including groundwater collected for drinking. Defendants committed each of the above-described acts and omissions knowingly, willfully, and/or with fraud, oppression, or malice, and with conscious and/or reckless disregard for the health and safety of others, and for Plaintiff's property rights.

238. As a direct and proximate result of Defendants' trespass, Plaintiff has incurred significant expensed and costs described above.

**COUNT VI:**  
**ACTUAL FRAUDULENT TRANSFER**  
**(DuPont and Chemours Co.)**

239. Plaintiff incorporates by reference each and every allegation set forth in all preceding paragraphs as if fully restated herein.

240. Through their effectuation of the Spinoff, Chemours Co. and DuPont (the "Fraudulent Transfer Defendants") caused Chemours Co. to transfer valuable assets to DuPont, including but not limited to the \$3.9 billion dividend (the "Transfers"), while simultaneously assuming significant liabilities (the "Assumed Liabilities").

241. The Transfers and Assumed Liabilities were made for the benefit of DuPont.

242. At the time that the Transfers were made and the Liabilities were assumed, and until the Spinoff was complete, DuPont was in a position to, and in fact did, control and dominate Chemours Co.

243. The Fraudulent Transfer Defendants made the Transfers and incurred the Assumed Liabilities with the actual intent to hinder, delay, and defraud the creditors or future creditors of Chemours Co.

244. Plaintiff has been harmed as a result of the conduct of the Fraudulent Transfer Defendants.

245. Plaintiff is entitled to avoid the Transfers and to recover property or value transferred to DuPont.

**COUNT VII:**  
**CONSTRUCTIVE FRAUDULENT TRANSFER**  
**(DuPont and Chemours Co.)**

246. Plaintiff incorporates by reference each and every allegation set forth in all preceding paragraphs as if fully restated herein.

247. Chemours Co. did not receive reasonably equivalent value from DuPont in exchange for the Transfers and Assumed Liabilities.

248. Each of the Transfers and the assumption of the Assumed Liabilities by Chemours Co. was made to or for the benefit of DuPont.

249. At the time that the Transfers were made and the Assumed Liabilities were assumed, and until the Spinoff was complete, DuPont was in a position to, and in fact did, control and dominate Chemours Co.

250. The Fraudulent Transfer Defendants made the Transfers and assumed the Assumed Liabilities when Chemours Co. was engaged or about to be engaged in a business for which its remaining assets were unreasonably small in relation to its business.

251. Chemours Co. was insolvent or in contemplation of insolvency at the time of the Transfers or became insolvent as a result of the Transfers and its assumption of the Assumed Liabilities.

252. At the time that the Transfers were made and Chemours Co. assumed the Assumed Liabilities, the Fraudulent Transfer Defendants intended to incur, or believed or reasonably should have believed, that Chemours Co. would incur debts beyond its ability to pay as they became due.

253. Plaintiff has been harmed as a result of the Transfers.

254. Plaintiff is entitled to avoid the Transfers and to recover property or value transferred to DuPont.

**COUNT VIII:**  
**PUNITIVE DAMAGES**

255. Plaintiff incorporates by reference each and every allegation set forth in all preceding paragraphs as if fully restated herein.

256. Defendants engaged in willful, wanton, malicious, and or/reckless conduct that caused the foregoing damage upon Plaintiff, disregarding their protected rights, giving rise to one or more aggravating factors warranting punitive damages under N.C. Gen. Stat. § 1D-1 *et seq.*

257. Defendants' willful, wanton, malicious, and/or reckless conduct includes but is not limited to Defendants' failure to take all reasonable measures to ensure PFAS would not be released into the environment and inevitably result in the contamination of Plaintiff's water systems in North Carolina.

258. Under the circumstances, Defendants engaged in fraudulent or willful and wanton conduct within the meaning of N.C. Gen. Stat. § 1D-5(4) & (7) and N.C. Gen. Stat. § 15; and engaged in acts and omissions giving rise to one or more aggravating factors within the meaning of N.C. Gen. Stat. § 1D-15 and N.C. Gen. Stat. § 1D-35.

259. On information and belief, Defendants' relevant officers, directors, or managers participated in or condoned the conduct constituting the aggravating factor justifying punitive damages, within the meaning of N.C. Gen. Stat. § 1D-15(c).

260. Defendants have caused great harm to Plaintiff, acting with implied malice and an outrageously conscious disregard for Plaintiff's rights and safety, such that the imposition of punitive damages is warranted.

**PRAYER FOR RELIEF**

WHEREFORE, Plaintiff AQUA NORTH CAROLINA, INC. demands judgment against Defendants, and each of them, jointly and severally, and request the following relief from the Court:

- a. Compensatory damages in an amount to be demonstrated and proven at trial, including but not limited to damages for:
  - i. costs and expenses incurred by Plaintiff related to the past, present, and future investigation, sampling, testing, and assessment of the contamination of Plaintiff's wells and treatment center with PFAS; and
  - ii. costs and expenses incurred by Plaintiff related to past, present, and future treatment and remediation of PFAS contamination of Plaintiff's wells and treatment center;
- b. Punitive damages in an amount to be determined at trial;
- c. Interest on damages according to law;
- d. An order awarding costs, disbursements, and attorney fees incurred in pursuing this lawsuit;
- e. An order barring the transfer of DuPont's liabilities for the claims brought in this Complaint;
- f. Any other and further relief the Court deems just, proper, and equitable.

**DEMAND FOR JURY TRIAL**

Plaintiff AQUA NORTH CAROLINA, INC. demands a trial by jury of all issues so triable as a matter of right.

Respectfully submitted, this 9th day of April, 2021.



Mona Lisa Wallace, N.C. State Bar No. 9021  
John Hughes, N.C. State Bar No. 22126  
Wallace & Graham, P.A.  
525 N. Main Street  
Salisbury, NC 28144  
Phone: 704-633-5244  
mwallace@wallacegraham.com  
jhughes@wallacegraham.com

**Counsel for Plaintiffs**

Of counsel:  
NAPOLI SHKOLNIK

Paul J. Napoli, Esq.  
270 Muñoz Rivera Avenue,  
Hato Rey, Puerto Rico 00918  
Tel: (833) 271-4502  
Fax: (646) 843-7603  
[pnapoli@nsprlaw.com](mailto:pnapoli@nsprlaw.com)

Andrew W. Croner, Esq.  
360 Lexington Ave., 11th Floor  
New York, NY, 10017  
Tel: (212) 397-1000  
Fax: (646) 843-7603  
[acroner@napolilaw.com](mailto:acroner@napolilaw.com)

-and-

COHEN PLACITELLA &  
ROTH, PC  
Robert L. Pratter, Esq.  
Christopher M. Placitella, Esq.  
Michael Coren, Esq.  
Two Commerce Square  
2001 Market Street, Suite 2900  
Philadelphia, PA 19103  
Tel: 215-567-3500  
Fax: 215-567-6019  
[RPratter@cprlaw.com](mailto:RPratter@cprlaw.com)  
[MCoren@cprlaw.com](mailto:MCoren@cprlaw.com)

*Of Counsel for Plaintiff  
pro hac vice applications forthcoming*